

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-4. (canceled).

5. (currently amended): A carrying member with a cleaning function, comprising a carrying member and a cleaning sheet comprising a support, a cleaning layer provided on one side of the support, an adhesive layer provided on the other side of the support, and a releasable protective film laminated on the cleaning layer,

wherein the cleaning layer comprises a polyimide resin which is heat-resistant, and a releasable protective film laminated on the cleaning layer, wherein each of the relative intensities of the fragment ions of CH_3Si^+ , $\text{C}_3\text{H}_9\text{Si}^+$, $\text{C}_5\text{H}_{15}\text{Si}_2\text{O}^+$, $\text{C}_5\text{H}_{15}\text{Si}_3\text{O}_3^+$, $\text{C}_7\text{H}_{21}\text{Si}_3\text{O}_2^+$, CH_3SiO^- , $\text{CH}_3\text{SiO}_2^-$ and Si^+ in the cleaning layer, when the protective film is peeled off the cleaning layer, is 0.1 or less according to time-of-flight secondary ion mass spectrometry, relative to C_2H_3^+ in the case of positive ion or O^- in the case of negative ion,

wherein the cleaning layer has a tensile modulus of 10 MPa or more as determined according to JIS K7127 and exhibits an adhesive strength of 0.2N/10 mm width or less when peeled off a silicon wafer at an angle of 180° as determined according to JIS Z0237, and

wherein the cleaning sheet is laminated on the carrying member through an adhesive layer,

wherein the carrying member is a semiconductor wafer or base for a flat panel display,
and

wherein the releasable protective film is a polyolefin-based film comprising polyethylene,

polypropylene, polybutene, polybutadiene or polymethylpentene.

6-7. (canceled).

8. (currently amended): A carrying member with a cleaning function, comprising a carrying member and a cleaning layer comprising a polyimide resin which is heat-resistant provided on at least one side of the carrying member, wherein each of the relative intensities of the fragment ions of CH_3Si^+ , $\text{C}_3\text{H}_9\text{Si}^+$, $\text{C}_5\text{H}_{15}\text{Si}_2\text{O}^+$, $\text{C}_5\text{H}_{15}\text{Si}_3\text{O}_3^+$, $\text{C}_7\text{H}_{21}\text{Si}_3\text{O}_2^+$, CH_3SiO^- , $\text{CH}_3\text{SiO}_2^-$ and Si^+ in the cleaning layer is 0.1 or less according to time-of-flight secondary ion mass spectrometry, relative to C_2H_3^+ in the case of positive ion or O^- in the case of negative ion,

wherein the cleaning layer has a tensile modulus of 10 MPa or more as determined according to JIS K7127 and exhibits an adhesive strength of 0.2N/10 mm width or less when peeled off a silicon wafer at an angle of 180° as determined according to JIS Z0237,

wherein the carrying member is a semiconductor wafer or base for a flat panel display,

and

wherein a releasable protective film is laminated on the cleaning layer and the releasable protective film is a polyolefin-based film comprising polyethylene, polypropylene, polybutene, polybutadiene or polymethylpentene.

9. (original): The carrying member according to claim 8, wherein the cleaning layer has substantially no adhesive strength.

10. (canceled).

11. (withdrawn): A carrying member with a cleaning function, comprising a carrying member and a cleaning layer provided on at least one side of the carrying member, wherein the time required until the degree of vacuum in a chamber which has been temporarily reduced from 3×10^{-10} torr when the carrying member is put therein at a temperature of 50°C is returned to 1×10^{-9} torr is 100 minutes or less after putting the carrying member in the chamber.

12. (withdrawn): The carrying member with a cleaning function according to claim 11, wherein the cleaning layer has substantially no adhesive strength.

13. (withdrawn): The carrying member with a cleaning function according to claim 11 or 12, wherein the cleaning layer comprises a heat-resistant polymer resin.

14. (withdrawn): The carrying member with a cleaning function according to claim 11 or 12, which further comprises a support, wherein the support has the cleaning layer provided on one side thereof and an adhesive layer provided on the other thereof and the cleaning layer is provided on the carrying member through the adhesive layer.

15. (withdrawn): A method of cleaning a substrate processing equipment which comprises conveying a cleaning sheet defined in claim 1, or a carrying member with a cleaning function defined in any one of claims 5, 8 and 11 into a substrate processing equipment.

16. (withdrawn): A substrate processing equipment cleaned by a cleaning method defined in claim 15.

17-19. (canceled).

20. (currently amended): The carrying member according to ~~claim 17~~claim 8, wherein the releasable protective film is a film which has been treated with a silicone-based, a long-chain alkyl-based, a fluorine-based, an aliphatic acid amide-based or a silica-based release agent.

21-22. (canceled).

23. (previously presented): The carrying member according to claim 5, wherein the releasable protective film is a film which has been treated with a silicone-based, a long-chain alkyl-based, a fluorine-based, an aliphatic acid amide-based or a silica-based release agent.